

are not, as is usually stated, filaments, but films of protoplasm, which under ordinary circumstances close in the fluid cavities. The intima and media of the vessels are nothing more than ordinary flattened stroma cells. This shape they easily lose. Except in the deepest layers of the mucosa, the vessels have no specialized supporting coats (muscle, elastic tissue). The vessels are obviously so constructed as to allow a ready and universal opening up of their walls, and the structure and consistence of the stroma such as to permit its ready displacement by fluid or blood. The œdematous infiltration of the tissues, which precedes the hemorrhagic escape, is due neither to a mechanical displacement or filtration of fluid from the vessels, nor to a secretory activity of the intimal cells. It is dependent on protoplasmic changes, which result in an active imbibition of fluid from the vessels by a process of osmosis. So far as we at present know, this change is due to a widespread liberation of crystalloid elements in the tissues. The infiltration of the stroma with blood corpuscles is, in all probability, due to exactly the same cause. In consequence of its peculiar structure, the uterine mucosa must be looked upon, throughout its whole extent, as a potential blood sponge.

OPHTHALMOLOGY.

UNDER THE CHARGE OF

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Self-inflicted Ocular Traumatism among Russian Conscripts.—SEIDENMANN (*Centralbl. f. prak. Augenhk.*, October, 1910, p. 293) finds that such injuries, usually involving the right eye, and either self-inflicted or betraying the unskilled handiwork of the quack, may be comprised under three categories: (a) Opacities of the cornea opposite the pupil; (b) traumatic cataracts; and (c) destruction of the entire globe through application of leeches to the cornea. The mechanism producing the corneal injuries is not entirely certain. It is probable that that membrane is first cauterized with nitrate of silver and the wound thus caused treated with potassium iodide. The cataracts always betray their origin by the minute corneal opacities which gave entrance to the needle. The leeches, the cruellest method of all, suck out the aqueous humor, causing extensive intra-ocular hemorrhage, with detachment of the retina and choroid. The final result is a shrunken stump.

Pigmentation of the Retina in Nephritis.—RACHLIS (*Klin. Monatsbl. f. Augenhk.*, September, 1910, p. 322) from microscopic examination, concludes that pigmentation of the retina in nephritis may occur from degenerative changes of the external and middle layers of that

membrane, the choriocapillaris being intact. Such degenerative changes of the retina can be regarded as consequences of the nephritis. They are not analogous to the pigmentation which occurs in the fatty cells in fatty infiltration of the retina. The ophthalmoscopic appearances of choroiditis disseminata are sometimes found in changes of the pigment epithelium and retina alone when the choroid itself is healthy.

Isolated Monolateral Paralysis of the Third Nerve of Aneurysmal Origin.—From an analysis of cases of this kind, including a personal observation, PASCHEFF (*Archiv. d'ophtal.*, October, 1910, p. 634) finds that when an aneurysm causes paralysis of the third nerve alone, it is uniformly seated upon the trunk of the internal carotid, between the origins of the anterior and posterior communicating arteries. When the aneurysm involves the origin of the posterior cerebral artery, the paralysis of the third nerve is accompanied by paralysis of the corresponding facial. The only subjective symptoms (besides the diplopia) are pains in the head and constant noises upon the same side as the aneurysm. These cases always end fatally, usually quite suddenly, shortly after the appearance of the paralysis.

Detachment of the Retina Treated by Tuberculin.—Poorly or non-vascularized tissues like the tendons, aponeuroses, serous membranes, cartilage, being the seats of election of bacillary lesions, DOR (*Clin. ophtal.*, August, 10, 1910, p. 362) raises the question whether the vitreous body might not be added to the same list. Detachment of the retina, being secondary to retraction of the vitreous, presupposes antecedent disease of that body. The fact that the lesion is particularly apt to occur in myopia argues that the latter simply creates the anatomical conditions favorable to such an occurrence, just as osseous tuberculosis affects by preference bones which have undergone too rapid growth. Upon systematically questioning patients suffering from detachment, he has frequently found an antecedent pleurisy, arthritis, adenopathy, chronic rheumatism, or chronic bronchitis. Based upon such considerations, he has treated five cases of detachment by tuberculin, with complete and permanent re-application of the retina in three cases, re-application followed by relapse in one, and failure in a fifth—a degree of success which can certainly not be the result of coincidence.

The Principal Meridians in Astigmatism in Relation to the Lateral Inclination of the Head.—ORESTE (*Ann. d'ocul.*, June, 1910, p. 459) has studied the changes in the direction of the principal meridians in astigmatism when the head is inclined laterally. He finds that in the majority of cases the eye executes a movement of rotation about its antero-posterior axis in the inverse direction, to compensate, in part, the lateral inclination of the head. This movement of compensatory rotation, nil in some cases, varies in general between one and four to five degrees on the average, but may attain as much as eight. In some cases such compensation takes place in a single direction only. It has been supposed that when a vertical line is fixed, and the head is thence turned laterally, the line continues to be seen in its vertical position because the eye tends to return to the primitive position. The compensation possible, however, is too weak to overcome inclination of the head of any considerable